

GUEST EDITORIAL PREFACE

Special Section on Collaborative Technology for Coordinating Crisis Management (CT2CM)

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We are pleased to present you this special issue of the International Journal of Information Systems for Crisis Response and Management, gathering the extended versions of 2 papers selected from the 1st and 2nd Collaborative Technology for Coordinating Crisis Management (CT2CM) tracks. CT2CM 2011 and CT2CM 2012 tracks took place respectively in Paris and Toulouse (France) within the WETICE conference (IEEE International conference on state-of-the-art research in enabling technologies for collaboration).

Since its first edition, CT2CM tracks have been aiming at bringing together researchers interested in foundations, techniques, methodologies and applications of Collaborative Information Technologies for Coordinating Crisis Management.

Following the two tracks, we selected 5 papers (among 16 papers) to be extended for submission to this special issue. After two

rounds of reviews, from these 5 papers, 2 were accepted for publication:

1. Lisa Wood, Monika Büscher, Bernard van Veelen and Sander van Splunter: *Agile Response and Collaborative Agile Workflows*
2. Daniela Pohl, Abdelhamid Bouchachia and Hermann Hellwagner: *Supporting Crisis Management via Detection of Sub-Events in Social Networks*

The first paper of Lisa Wood and al. deals with collaboration and agility. Agility in the common sense is the ability to react quickly and easily to a stimulus. Applied to crisis management, this is also a useful concept: response organizations have well-defined procedures and processes but at the same time should be able to recombine them during extreme conditions in order to solve anticipated events. In their paper, Lisa Wood and al. develop a proposal based

on the idea of collaborative agile workflows. Agility is here people's ability to reconfigure knowledge, skills and resources on the fly at runtime during the occurrence of a crisis. In order to support the collaboration in an emergency response, this paper use workflows, annotations and self-management techniques to improve the awareness.

The second paper of Daniela Pohl and al. deals with scalability and social content. Crisis situations most often involves large number of persons, a lot of events and communications, on potentially very large area. Getting an accurate idea of the situation and of its evolution is then a very important question for responders when they try to coordinate their operations and take decisions where the life and death of people is at stake. Nowadays, more and more people have at hand, knowingly or not, communication devices and sensors that can provide very useful information implicitly or explicitly to central authorities in charge of event and crisis management. The problem is then to be able to interpret this potentially very large amount of information, to make sense of it at the pace of the event, i.e. in near real time. In their paper,

Daniela Pohl et al. follows a very popular trend in current research on crisis management. It proposes to analyse user generated content in real time to detect sub-events that require specific attention and/or immediate response. They propose to use clustering algorithms to sort out unrelated pieces of information in order to make sense of them. It is well understood that the amount of information provided by people during an event will most probably grow exponentially and that this kind of approach could be of first importance to help responders to make sense of it.

Finally, the editors of this special issue wish to thank those who made CT2CM and this special issue possible: Bartel Van de Walle and Murray E. Jennex, editors in chief of IJSCRAM journal, the WETICE organizers, the regular committee members of CT2CM and the additional reviewers for this special issue.

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François Charoy is professor of computer science at TELECOM Nancy and head of the Score team at Inria/LORIA research center, at University of Lorraine. His research interests include service oriented computing, business process management, CSCW and information systems for crisis management.

Chihab Hanachi is professor in Computer Science at Toulouse 1 University (France), and member of the IRT Laboratory (SMAC Team). His research interests have been the definition of coordination models for Agent Oriented Information Systems. Several coordination models have been investigated and formalized such as organizational structuring, contracting, negotiation and interaction protocols. These models have been applied to several distributed, cooperative, open and large scale applications such as crisis management, inter-organizational workflow or cooperative information gathering. He has also been a member of AgentLink, the ESPRIT-funded European Network of Excellence in the area of agent-based computing. He has also initiated the CT2CM track (Collaborative Technology for Coordinating Crisis) within the WETICE conference.

Serge Stinckwich is Associate-Professor at the University of Caen Lower Normandy in France and is member of the UMMISCO (Unité de Modélisation Mathématique et Informatique des Systèmes Complexes) international research team affiliated to IRD (Institut de Recherche pour le Développement) and Paris 6 University. Since several years, his research interests lie at the intersection of software engineering and complex systems including multi-agent and robotics systems. At the application level, he has done extensive work on rescue robotics applications and more recently on environmental surveillance, disaster management information system and computational epidemiology. He serves as program committee member for many conferences. He also serves as Associate Editor for IEEE ICRA (IEEE International Conference on Robotics and Automation) conference.